

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method for manufacturing a plastic optical fiber, the method comprising the steps of:

(a) applying winding tension to the heated plastic optical fiber; ~~and~~

(b) winding the plastic optical fiber such that the plastic optical fiber just after the winding process has the shrinkage of 0.10% or smaller; and

(c) adjusting the winding tension by an adjustment tension that is different from the winding tension.

wherein the adjustment tension is 1.5 MPa to 7.0 MPa.

2. (original): The method according to claim 1, wherein the diameter of the plastic optical fiber is 1000 μ m or smaller.

3. (original): The method according to claim 1, wherein the drawing tension is 0.5 MPa to 5.0 MPa.

4. (canceled).

5. (canceled).

6. (original): The method according to claim 1, wherein the heated plastic optical fiber is produced by melt-drawing a plastic optical fiber base material.

7. (original): The method according to claim 1, wherein the plastic optical fiber is wound around a winding member that comprises a bobbin body and a soft material wound around the bobbin body;

wherein the hardness of the soft material measured by type E Durometer is 10 to 70.

8. (original): The method according to claim 1, wherein the clad part of the plastic optical fiber is formed from fluorine resin.

9. (currently amended): The method according to claim 1, wherein the core part of the plastic optical fiber is formed from acrylic resin.

10. (original): The method according to claim 1, wherein the core part of the plastic optical fiber has a refractive index profile in which the refractive index decreases from the center to the surface.

11. (canceled).

12. (currently amended): A method for manufacturing a plastic optical fiber, the method comprising the steps of:

(a) melting and drawing a plastic optical fiber base material to form a plastic optical fiber;

(b) applying winding tension to the plastic optical fiber; and

(c) winding the plastic optical fiber such that the plastic optical fiber just after the winding process has the shrinkage of 0.10% or smaller; and

(d) adjusting the winding tension by an adjustment tension that is different from the winding tension.

wherein the adjustment tension is 1.5 MPa to 7.0 MPa.